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# A National Survey of Oral Health Education in U.S. Allopathic and Osteopathic Schools

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# Study Objectives

- To survey U.S. allopathic and osteopathic schools to determine how many schools have an oral health curriculum
- To analyze relationships between oral health awareness in schools and proximity to dental schools/residencies, school location, and school size
- To determine awareness of AAMC Report IX: Oral Health Education for Medical and Dental Students - Recommendations for Oral Health Curriculum
- To determine awareness of developed oral health curricula such as STFM's Smiles for Life
- To determine desire to institute oral health curriculum and/or desire to use developed curricula

# Background

- Oral health is an important component of overall health.
- Caries are the most common disease of early childhood.
- Many systemic diseases, such as diabetes and heart disease, can be made worse by periodontitis.
- **2000, *Surgeon General Report on Oral Health*** reminded educators, practitioners, and the public that oral diseases and disorders present a systemic burden.
- **2003, the *National Call to Action to Promote Oral Health*** called for revamping health professions education to include oral health to reduce disparities.

# Background

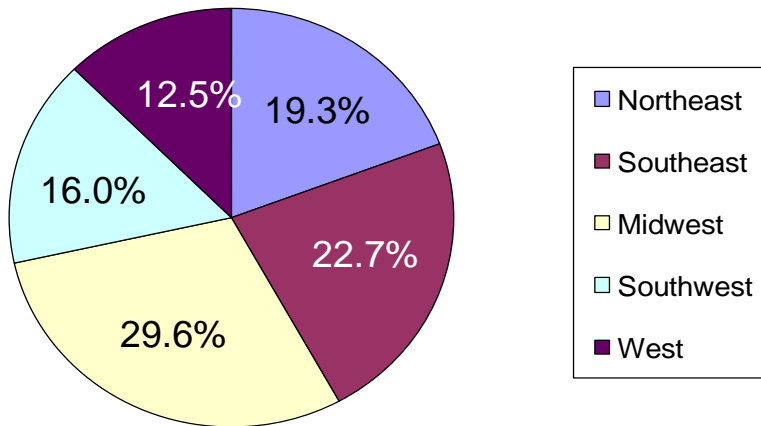
- **2008, Association of American Medical Colleges' (AAMC) Medical Schools Objectives Project (MSOP) on Oral Education for Medical Students Report** – Challenges medical schools to have a comprehensive oral health curriculum based on IOM reports.
- A few institutions have published articles on oral health curricula; however, it is unclear to what extent these types of programs are being implemented in the U.S.
- Meanwhile, one study of primary care physicians reveals that 90% believe that oral health is important, yet only 50% had any training in the subject (mostly in residency)

# Methods

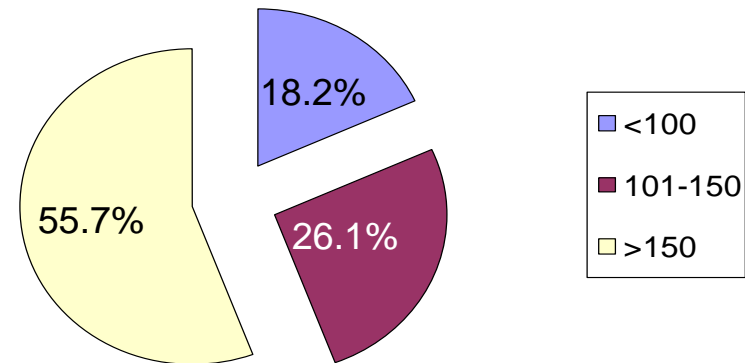
- A survey was developed in SurveyMonkey.
- The Deans of Education at 126 allopathic and 28 osteopathic schools were e-mailed initially about survey.
- One week later an e-mail containing a link to the survey was sent out.
- Reminder e-mails with the survey link were sent out for a total of 3 reminders.
- Each non-responding Dean was contacted a final time, by phone, and the survey was re-sent.
- The survey data was analyzed using SPSS.
- Frequency and percentile distributions of all variables were examined and associations with demographics (e.g., school size and location) were analyzed.

# Results: Demographics

Location of Schools



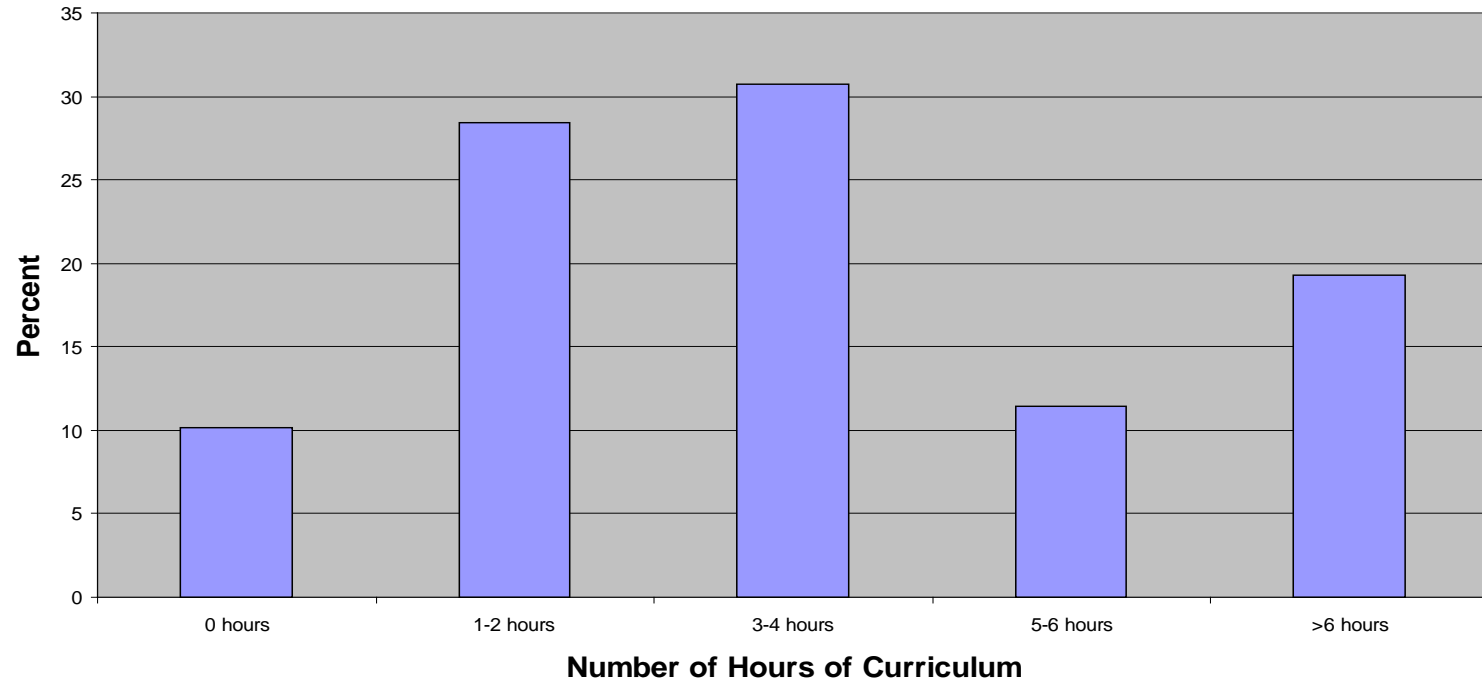
Matriculating Class Size



- ***A total of 88 schools responded (57.1% response rate).***  
(72 of 126 Allopathic schools, 13 of 28 Osteopathic schools and 3 were unidentified.)
- ***29.5%*** of schools reported having a ***Dental School***
- ***37.5%*** of schools reported having a ***Dental Residency***

# Results: Hours of Oral Health

## Hours of Oral Health Education Over 4 Years

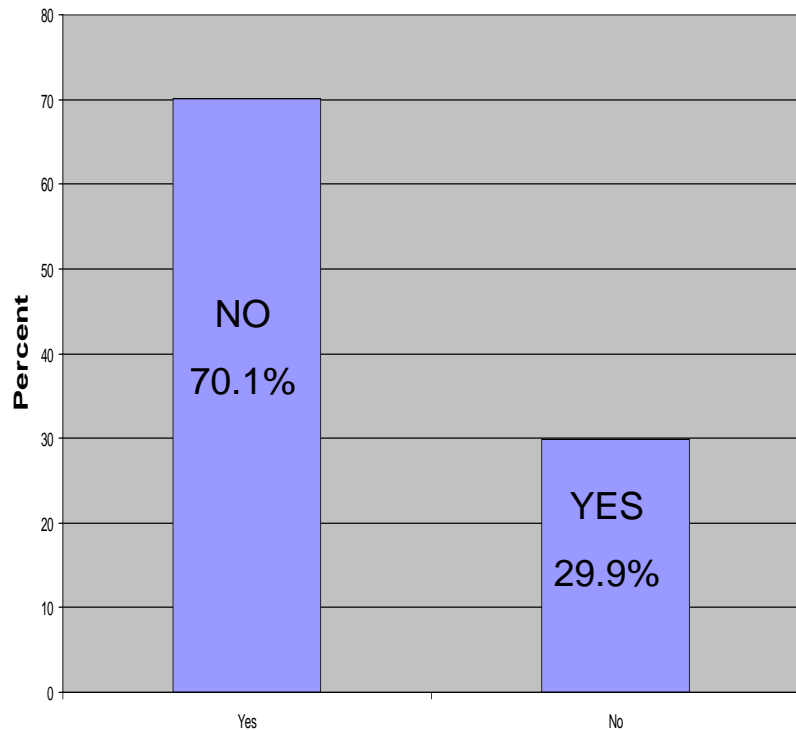


- Number of hours of OH curriculum ( $< 5$  vs  $\geq 5$ ) were not significantly related to having a dental school or dental residency ( $p=.271$ ) nor the location of the medical school ( $p=.728$ ).
- Schools with  $> 150$  students were significantly more likely to offer 5+ hours of OH curriculum compared to small or mid-sized schools. ( $p=.022$ )

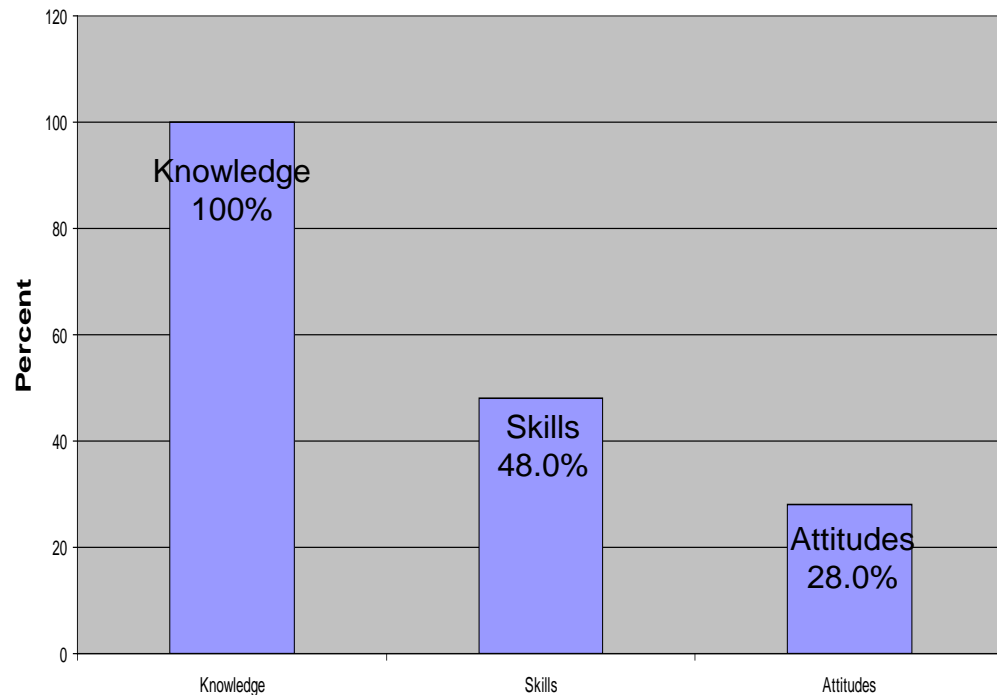


# Results: Oral Health Evaluation

Are students being evaluated on any OH domains?



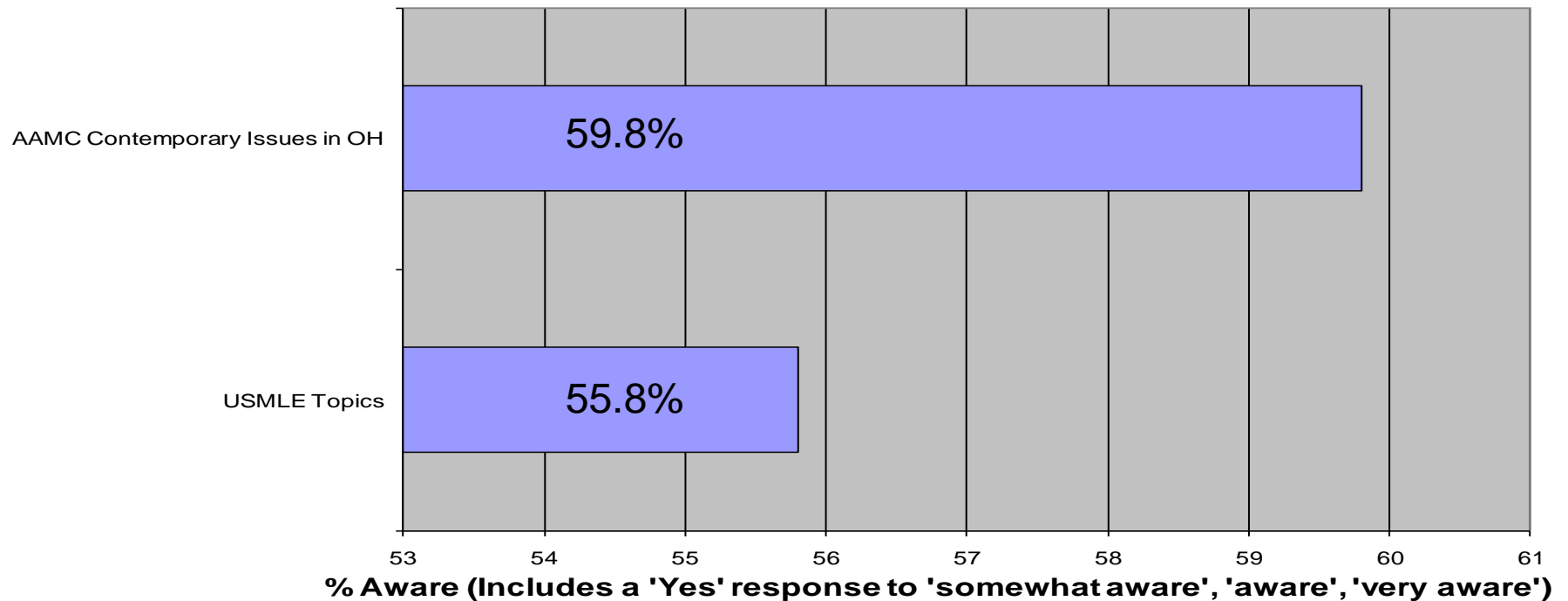
Of those schools evaluating students on OH, which domains are being evaluated?



- 37.5% of those who do evaluate students reported using an OSCE
- 43.5% of those who do evaluate students reported using clinical observation

# Results: Awareness of USMLE and AAMC Oral Health Topics

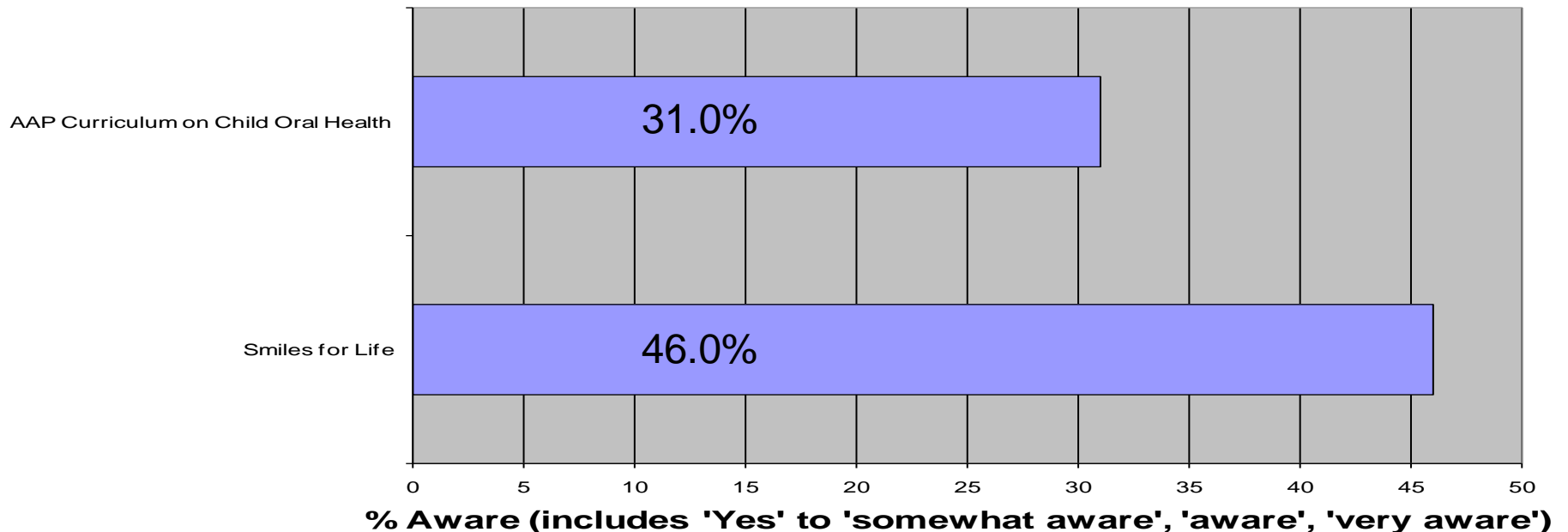
**Are You Aware of Oral Health Topics on USMLE or the AAMC's Contemporary Report on Oral Health?**



- There was no statistically significant relationship between awareness of the AAMC's Contemporary Issues in Oral Health or USMLE oral health topics and number of oral health curriculum hours ( $p=.176$  for AAMC;  $p=.099$  for USMLE).

# Results: Awareness of Established OH Curriculum

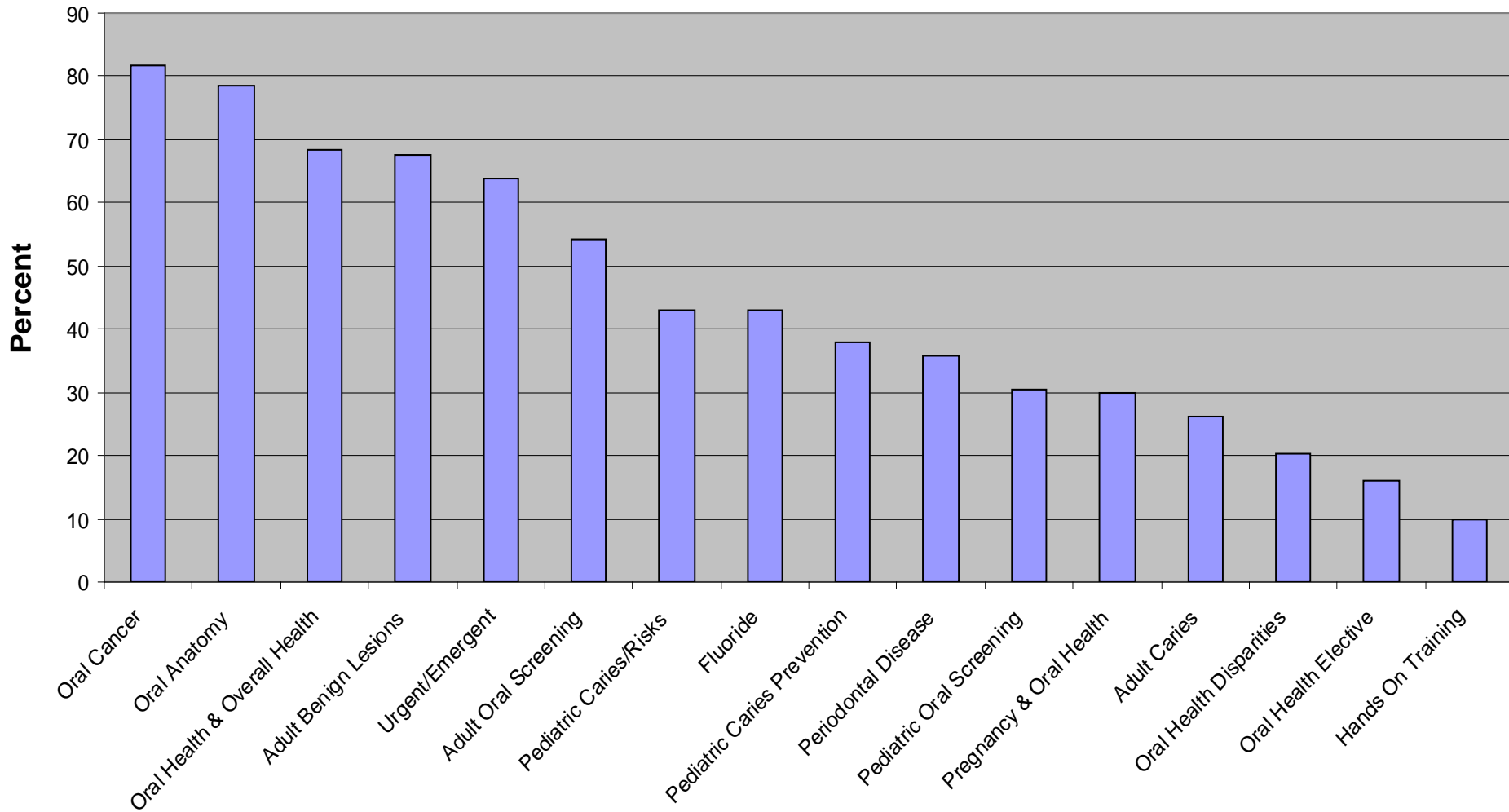
## Awareness of Established Oral Health Curriculum



- 17.5% of respondents who were aware of Smiles for Life are using it.
- 50.0% of respondents who were aware of AAP curriculum are using it.
- 43.8% of respondents would definitely or likely use an established curriculum such as Smiles for Life or AAP Child Oral Health Curriculum.

# Results

## Topics Covered in Oral Health Curriculum



# Discussion

- It appears that small to medium sized medical schools need the most targeting for development and implementation of an oral health curriculum.
- Need to investigate further why schools that are aware of the AAMC oral health guidelines are not implementing a more robust oral health curriculum.
- Developing questions for the AAMC's Graduate Questionnaire may help validate our study by gauging students' perspectives on their oral health curriculum.

# Discussion

- Next steps should include:
  - Contacting schools that are interested in creating or expanding their oral health curriculum
  - Creating a listserv of oral health educator champions at schools to share ideas and motivate each other
  - Promoting to all schools: the AAMC report, the fact that the USMLE board exam has oral health topics, and the Smiles for Life and AAP materials
  - Sharing the results of our survey with oral health educators in states where schools are not providing oral health education to encourage collaboration

# Conclusions

- Nearly three-quarters of schools have 4 hours or less of oral health curriculum; 10% have none.
- Location of the school and presence of a dental school or residency were not associated with the number of hours of OH curriculum.
- Matriculating class size was significant, showing that larger schools (>150 students) were more likely to have  $\geq 5$  hours of curriculum.
- More than 50% of the schools were aware of USMLE oral health topics and the AAMC's oral health guidelines; however, being aware of these was not associated with having more hours of OH curriculum.

# Conclusions

- Only 30% of schools are evaluating students on OH curriculum; within these schools, evaluation of skills and attitudes need improvement.
- One-third of schools were aware of established oral health curriculum such as Smiles for Life and 50% for the AAP's Oral Health Curriculum; however, only 7 schools are using Smiles for Life and 12 schools are using AAP materials.
- Schools reported being interested in using established curriculum rather than designing their own.



# Acknowledgements

- Heather-Lyn Haley for assistance with creating the survey on SurveyMonkey
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